

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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1. (Original) An image processing apparatus comprising:
extraction means for setting, when a plurality of still image data of successive original images of the same format have been input, one of the plural still image data as reference image data, and extracting respective image correlation information of the plural still image data including the reference image data;
encoding means for encoding the image correlation information extracted by the extraction means into encoded data; and
output means for outputting the encoded data encoded by the encoding means and the reference image data.
 2. (Original) An image processing apparatus according to claim 1, wherein said plural still image data are a plurality of digital still image data.
 3. (Original) An image processing apparatus according to claim 1, wherein said extraction means extracts, from the input plural still image data, image correlation information among the plural still image data including the reference image data by using an exclusive OR.
 4. (Original) An image processing apparatus according to claim 1, wherein said extraction means extracts the image correlation information by calculating an exclusive OR of pixel values of pixel positions associated with preceding image and subsequent image data in the order of the plural still image data including the reference image data.

5. (Original) An image processing apparatus according to claim 1, wherein said encoding means compresses the plural image correlation information by run-length encoding.

6. (Original) An image processing apparatus comprising:
input means for inputting encoded data formed by encoding respective image correlation information between reference image data and a plurality of still image data;

decoding means for decoding the respective image correlation information from the encoded data input by the input means; and

a¹ image restoring means for restoring the plural still image data from the image correlation information decoded by the decoding means and the reference image data input by the input means.

7. (Original) An image processing apparatus according to claim 6, wherein said decoding means decodes the respective image correlation information from the encoded data by a run-length code decoding method.

8. (Original) An image processing apparatus according to claim 6, wherein said image restoring means restores the plural still image data from the respective image correlation information and the reference image data by a logical operation.

9. (Original) An image processing apparatus according to claim 6, wherein said image restoring means restores next image data by a logical operation of image correlation information relating to the reference image data and the next image data in the respective image correlation information and the reference image data, restores image data after next by a logical operation of image correlation information relating to the restored next image data and the image data after next and the next image data, and also restores subsequent

image data by a logical operation of image correlation information relating to preceding image data and the subsequent image data in the order of image data and the restored preceding image data, thereby restoring the plural still image data.

10. (Original) An image processing apparatus comprising:

a¹ extraction means for setting, when a plurality of still image data of successive original images of the same format have been input, one of the plural still image data as reference image data, and extracting respective image correlation information of the plural still image data including the reference image data;

first encoding means for encoding the respective image correlation information extracted by the extraction means into first encoded data;

second encoding means for encoding the reference image data into second encoded data; and

output means for outputting the second encoded data encoded by the second encoding means and the first encoded data encoded by the first encoding means.

11. (Original) An image processing apparatus according to claim 10, wherein said first encoding means checks a run of zero values in the respective image correlation information and produces entropy codes.

12. (Original) An image processing apparatus according to claim 10, wherein said first encoding means and said second encoding means are encoding means of the same structure.

13. (Original) An image processing apparatus according to claim 10, wherein said first encoding means and said second encoding means are run-length encoding means.

14. (Original) An image processing apparatus comprising:

input means for inputting first encoded data formed by encoding reference image data, and second encoded data formed by encoding respective image correlation information among a plurality of still image data;

first decoding means for decoding the reference image data from the first encoded data input by the input means;

second decoding means for decoding the respective image correlation information from the second encoded data input by the input means; and

image restoring means for restoring the plural still image data from the respective image correlation information decoded by the second decoding means and the reference image data decoded by the first decoding means.

a 15. (Original) An image processing apparatus according to claim 14, wherein said first decoding means and said second decoding means are decoding means of the same structure.

16. (Original) An image processing apparatus according to claim 14, wherein said first decoding means and said second decoding means are decoding means for performing decoding on the basis of a run-length decoding method.

17. (Original) An image processing apparatus comprising:

image correlation enhancing means for enhancing, when a plurality of digital still image data of successive original images of the same format have been input, an image correlation degree by rearranging the image data such that a Hamming distance among the images decreases;

extraction means for extracting respective image correlation information from the plural digital still image data rearranged by the image correlation enhancing means, by calculating an exclusive OR of pixel values of pixel positions associated with preceding image and subsequent image data in the order of the image data;

encoding means for compressing the respective image correlation information extracted by the extraction means to encoded data by run-length encoding; and

output means for outputting the encoded data encoded by the run-length encoding by the encoding means, and first image data of the image data rearranged by the image correlation enhancing means.

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18. (Original) An image processing apparatus according to claim 17, wherein said extraction means compares a Hamming distance between preceding image data and subsequent image data in the order of the plural digital still image data rearranged by the image correlation enhancing means, with a Hamming distance between preceding image data and image data obtained by parallel-moving subsequent image data, and if the Hamming distance between the preceding image data and the image data obtained by parallel-moving the subsequent image data is smaller, said extraction means calculates an exclusive OR of pixel values of pixel positions associated with the preceding image and the parallel-moved subsequent image data in the order of the image data, thereby extracting the respective image correlation information.

19. (Original) An image processing apparatus comprising:
code conversion means for converting a plurality of input multi-value still image data of successive original images of the same format to gray codes;

extraction means for setting one of the plural multi-value still image data converted by the code conversion means to the gray codes as reference image data, and extracting respective image correlation information of the plural multi-value still image data including the reference image data by an exclusive OR operation of the same bit;

first encoding means for checking a run of zero values in the respective image correlation information extracted by the extraction means, and converting the image correlation information to entropy codes, thus producing first encoded data;

second encoding means for encoding the reference image data to second encoded data; and

output means for outputting the second encoded data encoded by the second encoding means and the first encoded data encoded by the first encoding means.

20. (Original) An image processing apparatus according to claim 19, wherein the first encoding means comprises Huffman encoding means.

a1 21. (Original) An image processing apparatus comprising:
input means for inputting second encoded data formed by encoding reference image data, and first encoded data formed by encoding respective image correlation information among a plurality of multi-value still image data;

first decoding means for decoding the reference image data from the second encoded data input by the input means:

second decoding means for decoding the respective image correlation information from the first encoded data input by the input means, on the basis of an entropy code decoding method;

image restoring means for restoring the plural multi-value still image data by a logical operation from the respective image correlation information decoded by the second decoding means and the reference image data decoded by the first decoding means; and

code conversion means for converting the plural multi-value image data restored by the image restoring means from gray codes to original codes.

22. (Original) An image processing apparatus according to claim 21, wherein the second decoding means comprises Huffman-code decoding means.

23. (Currently Amended) An image processing method comprising the steps of:

setting, when a plurality of still image data of successive original images of the same format have been input, one of the plural still image data as reference image data, and extracting respective image correlation information of the plural still image data including the reference image data;

encoding the extracted image correlation information into encoded data;
and

~~output means for~~ outputting the encoded data and the reference image data.

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24. (Original) An image processing method comprising the steps of:
inputting encoded data formed by encoding respective image correlation information between reference image data and a plurality of still image data;

decoding the respective image correlation information from the input encoded data; and

restoring the plural still image data from the decoded image correlation information and the reference image data.
